BRUHAT BANGALORE MAHANAGARA PALIKE

Name of the Work : Improvements to Roads,drains,footpath and park in ward no.08,Bytarayanapura Division (Package includes 11 Works of Rs 1010 lakhs)

BYATARAYANAPURA DIVISION

5th PART BILL

TEST REPORTS

TEJUS CONSULTANTS
CONSULTING ENGINEERS AND DESIGNERS
No.58 MIG, 6th Cross, 3rd Main
1st Stage, Basaveshwaranagar
Bangalore-560079
☎ 080 - 23287532
email: tejusconsultants@gmail.com

Name of the Work : Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli

TEJUS
CONSULTANTS

No. TC / BBMP / BYT-PMC / 322 / 17 – 18

Date:

To
The Executive Engineer
Byatarayanapura Divison
Bruhat Bangalore Mahanagara Palike
Bangalore – 560 092

Dear Sir

Sub: **Fifth RA bill for the work of Improvements to Roads, Drains, Footpath and Park in ward no.08,Bytarayanapura Division (Package includes 11 Works of Rs 1010 lakhs)**

In reference to the above subject, this is to bring to your kind notice that we have scrutinized the **Fifth RA bill** submitted by Sri.Pramodh M/s Karthik Enterprises, No. 123, Aiswaraya, 3rd Cross, Ramannaa Garden, Vidyaranyapura, Bangalore - 97, towards the above said work and arrived at an amount of **Rs. 10002370.25(Rupees One Crore Two Thousnad Three Hundred Seventy Rupees Twenty Five Paise Only)**. The work has been completed satisfactorily.

This is for your kind information.

Thank you and assuring you the best of our Services at all the times

For Tejus Consultants
(Nischal M)

TEJUS CONSULTANTS
No. 58, 3rd main, 6th Cross, 1st Stage KHB Colony, Basaveshwaranagar, Bangalore - 560079, O : +91 80 23287532, tejusconsultants@gmail.com

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TEST REPORT					
Clients	Bruhat Bangalore Mahanagara Palike				
Project	Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli				
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore				
Contractor	M/s Karthik Enterprises				
Total Weight in gr	3000				
SIEVE ANALYSIS					
Type of Material	40 mm down size			**Proposed Use**	PCC
Sample Location	At Site			**Date of Sampling**	12/7/2018
				Date of Testing	12/7/2018
IS Sieve Size	**Weight Retained in gm**	**Cum. Weight Retained in gm**	**Cumulative Weight Retained in %**	**Cumulative Weight Passing in %**	**Specific Limits as per IS 383-1970 (RA-2007)** **% of Passing For Graded Aggregate of Nominal Size**
80.00mm	0	0	0.00	100.00	100
63.00mm	0	0	0.00	100.00	-
40.00mm	120	120	4.00	96.00	95-100
20.00mm	1545	1665	55.50	44.50	30-70
10.00mm	650	2315	77.17	22.83	10-35
4.75mm	585	2900	96.67	3.33	0-5
Pan	100	3000	100.00	0.00	
Remarks :	Satisfactory / Not Satisfactory				

Consultant's Representative

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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TEST REPORT	
Clients	BRUHAT BENGALORE MAHANAGARA PALIKE
Project	Name Of work : - Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s Karthik Enterprises

SPECIFIC GRAVITY AND WATER ABSORPTION OF FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Sand/M sand	Proposed Use	Concrete
Location/Source	At Plant/site	Date of Sampling	12/7/2018
Period of Soaking	24 hours	Date of Testing	12/7/2018

Sl. No.	Test Property	TRIAL - 1	TRIAL - 2	TRIAL - 3	Average
A	Weight of sturated surface dry sample gm.	653	664	650	
B	Weight of oven - dry sample gm.	645	654	642	
C	Weight of Pycnometer Filled with water gm	1275	1275	1275	
D	Weight of Pycnometer + sample + water gm	1686	1691	1683	
E	Bulk specific gravity $\frac{B}{(C+A-D)}$	2.665	2.637	2.653	**2.652**
G	Absorption (%) $\frac{(A-B)*100}{B}$	1.240	1.529	1.246	**1.338**

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Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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TEST REPORT					
Clients	Bruhat Bangalore Mahanagara Palike				
Project	Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli				
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore				
Contractor	M/s Karthik Enterprises				
SIEVE ANALYSIS					
Total Weight:	3000 gms				
Type of Material	**Fine aggregate (River Sand/M sand)**		**Proposed Use**	Concrete	
Sample Location	At Plant/site		**Date of Sampling**	12/7/2018	
			Date of Testing	12/7/2018	
IS Sieve Size	**Weight Retained**	**Cum. Weight Retained**	**Cum. % Retained**	**Cum. % Passing**	**Spec. Limit (%) Passing (Zone-II)**
10.00 mm	0	0	0	100.00	**100**
4.75 mm	225	225	7.50	92.50	**90 - 100**
2.36 mm	270	495	16.50	83.50	**75 - 100**
1.18 mm	495	990	33.00	67.00	**55 - 90**
0.600 mm	510	1500	50.00	50.00	**35 -59**
0.300 mm	695	2195	73.17	26.83	**8-30**
0.150 mm	575	2770	92.33	7.67	**0 - 10**
Pan	230	3000			**-**
Remarks :			Satisfactory / Not Satisfactory		

Consultant's Representative

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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TEST REPORT ON CEMENT

Project	Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s Karthik Enterprises
Sample ID	Cement
Date of Sample Tested	12/07/18
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	45 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	385 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	5mm	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	27.00%	

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Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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TEST REPORT

Project	Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli				
Clients	Bruhat Bangalore Mahanagar Palike				
Consultants	TEJUS CONSULTANTS				
Contractor	M/s Karthik Enterprises				
Total Weight:	10000	gms			

SIEVE ANALYSIS

Type of Material	20 mm down size		**Proposed Use**	Concrete	
Sample Location	At Plant		**Date of Sampling**	18/07/18	
			Date of Testing	18/07/18	
IS Sieve Size	**Weight Retained**	**Cum. Weight Retained**	**Cum. % Retained**	**Cum. % Passing**	**Spec. Limit (%) Passing**
40.00 mm	0	0	0	100	**100**
20.00 mm	262	262	2.62	97.38	**95 - 100**
10.00 mm	4898	5160	51.60	48.40	**25 - 55**
4.75 mm	4425	9585	95.85	4.15	**0 - 10**
Pan	415	10000			

Remarks : ✓ Satisfactory / Not Satisfactory

Consultant's Representative

TEJUS CONSULTANTS

Assistant Executive Engineer
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike	
Project	Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli	
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore	
Contractor	M/s Karthik Enterprises	
Total Weight:	10000	gms

SIEVE ANALYSIS

Type of Material	12.5 mm down size		Proposed Use	CONCRETE	
Sample Location	Plant		Date of Sampling	18/07/18	
			Date of Testing	18/07/18	
IS Sieve Size (in mm)	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
20.0	0	0	0	100	100
12.5	560	560	5.60	94.40	90-100
10.0	3400	3960	39.60	60.40	40-85
4.75	5550	9510	95.10	4.90	0-10
Pan	490	10000			

Remarks : ✓ Satisfactory / Not Satisfactory

Consultant's Representative

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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TEST REPORT

Clients	BRUHAT BENGALORE MAHANAGARA PALIKE
Project	Name Of work : - Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s Karthik Enterprises

SPECIFIC GRAVITY AND WATER ABSORPTION ON FINE AGGREGATE (IS-2386-PART-3)

Type of Material	**Sand/M sand**	**Proposed Use**	Concrete
Location/Source	**At Plant/site**	**Date of Sampling**	18/07/18
Period of Soaking	**24 hours**	**Date of Testing**	18/07/18

Sl. No.	Test Property	TRIAL - 1	TRIAL - 2	TRIAL - 3	Average
A	Weight of sturated surface dry sample gm.	672	674	684	
B	Weight of oven - dry sample gm.	664	666	675	
C	Weight of Pycnometer Filled with water gm	1275	1275	1275	
D	Weight of Pycnometer + sample + water gm	1696	1698	1705	
E	Bulk specific gravity $\frac{B}{(C+A-D)}$	2.645	2.653	2.657	**2.652**
G	Absorption (%) $\frac{(A-B)*100}{B}$	1.205	1.201	1.333	**1.246**

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Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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TEST REPORT	
Clients	Bruhat Bangalore Mahanagara Palike
Project	Name Of work : - Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s Karthik Enterprises

SIEVE ANALYSIS

Total Weight:	**3000**	gms			
Type of Material	**Fine aggregate (River Sand/M sand)**		**Proposed Use**	Concrete	
Sample Location	At Plant/site		**Date of Sampling**	18/07/18	
			Date of Testing	18/07/18	
IS Sieve Size	**Weight Retained**	**Cum. Weight Retained**	**Cum. % Retained**	**Cum. % Passing**	**Spec. Limit (%) Passing (Zone-II)**
10.00 mm	0	0	0	100.00	**100**
4.75 mm	245	245	8.17	91.83	**90 - 100**
2.36 mm	288	533	17.77	82.23	**75 - 100**
1.18 mm	530	1063	35.43	64.57	**55 - 90**
0.600 mm	555	1618	53.93	46.07	**35 -59**
0.300 mm	665	2283	76.10	23.90	**8-30**
0.150 mm	510	2793	93.10	6.90	**0 - 10**
Pan	207	3000			**-**
Remarks :			Satisfactory / Not Satisfactory		

Consultant's Representative

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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TEST REPORT ON CEMENT

Project	Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s Karthik Enterprises
Sample ID	Cement
Date of Sample Tested	18/07/18
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	42 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	384 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	5 mm	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	27.00%	

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TEST REPORT					
Project	Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli				
Clients	Bruhat Bangalore Mahanagar Palike				
Consultants	TEJUS CONSULTANTS				
Contractor	M/s Karthik Enterprises				
Total Weight:	10000	gms			
SIEVE ANALYSIS					
Type of Material	20 mm down size		**Proposed Use**	Concrete	
Sample Location	At Plant		**Date of Sampling**	19/07/18	
			Date of Testing	19/07/18	
IS Sieve Size	**Weight Retained**	**Cum. Weight Retained**	**Cum. % Retained**	**Cum. % Passing**	**Spec. Limit (%) Passing**
40.00 mm	0	0	0	100	**100**
20.00 mm	290	290	2.90	97.10	**95 - 100**
10.00 mm	4785	5075	50.75	49.25	**25 - 55**
4.75 mm	4210	9285	92.85	7.15	**0 - 10**
Pan	715	10000			
Remarks :	Satisfactory / Not Satisfactory				

Consultant's Representative

TEJUS CONSULTANTS

Assistant Executive Engineer,
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Yelahanka Zone, B.B.M.P.,
Bangalore.

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No. 58, 3rd main, 6th Cross, 1st Stage KHB Colony, Basaveshwaranagar, Bangalore - 560079, O : +91 80 23287532, tejusconsultants@gmail.com

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TEST REPORT		
Clients	Bruhat Bangalore Mahanagara Palike	
Project	Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli	
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore	
Contractor	M/s Karthik Enterprises	
Total Weight:	10000	gms

SIEVE ANALYSIS

Type of Material	12.5 mm down size		Proposed Use	CONCRETE	
Sample Location	Plant		Date of Sampling	19/07/18	
			Date of Testing	19/07/18	
IS Sieve Size (in mm)	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
20.0	0	0	0	100	100
12.5	580	580	5.80	94.20	90-100
10.0	3250	3830	38.30	61.70	40-85
4.75	5745	9575	95.75	4.25	0-10
Pan	425	10000			

Remarks :	Satisfactory / Not Satisfactory

Consultant's Representative

TEJUS CONSULTANTS

Assistant Executive Engineer
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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TEST REPORT

Clients	BRUHAT BENGALORE MAHANAGARA PALIKE
Project	Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s Karthik Enterprises

SPECIFIC GRAVITY AND WATER ABSORPTION ON FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Sand/M sand	**Proposed Use**	Concrete
Location/Source	At Plant/site	**Date of Sampling**	19/07/18
Period of Soaking	24 hours	**Date of Testing**	19/07/18

Sl. No.	Test Property	TRIAL - 1	TRIAL - 2	TRIAL - 3	Average
A	Weight of sturated surface dry sample gm.	641	645	672	
B	Weight of oven - dry sample gm.	631	637	664	
C	Weight of Pycnometer Filled with water gm	1275	1275	1275	
D	Weight of Pycnometer + sample + water gm	1678	1678	1697	
E	Bulk specific gravity $\frac{B}{(C+A-D)}$	2.651	2.632	2.656	**2.646**
G	Absorption (%) $\frac{(A-B)*100}{B}$	1.585	1.256	1.205	**1.348**

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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TEST REPORT	
Clients	Bruhat Bangalore Mahanagara Palike
Project	Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s Karthik Enterprises

SIEVE ANALYSIS

Total Weight:	3000	gms			
Type of Materia	Fine aggregate (River Sand/M sand)		**Proposed Use**	Concrete	
Sample Location	At Plant/site		**Date of Sampling**	19/07/18	
			Date of Testing	19/07/18	

IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing (Zone-II)
10.00 mm	0	0	0	100.00	**100**
4.75 mm	255	255	8.50	91.50	**90 - 100**
2.36 mm	288	543	18.10	81.90	**75 - 100**
1.18 mm	410	953	31.77	68.23	**55 - 90**
0.600 mm	580	1533	51.10	48.90	**35 -59**
0.300 mm	798	2331	77.70	22.30	**8-30**
0.150 mm	563	2894	96.47	3.53	**0 - 10**
Pan	106	3000			-

Remarks : Satisfactory / Not Satisfactory

Consultant's Representative

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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TEST REPORT ON CEMENT	
Project	Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s Karthik Enterprises
Sample ID	Cement
Date of Sample Tested	19/07/18
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	42 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	395 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	4 mm	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	27.00%	

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Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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TEST REPORT					
Project	Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli				
Clients	Bruhat Bangalore Mahanagar Palike				
Consultants	TEJUS CONSULTANTS				
Contractor	M/s Karthik Enterprises				
Total Weight:	10000	gms			
SIEVE ANALYSIS					
Type of Material	20 mm down size		**Proposed Use**	Concrete	
Sample Location	At Plant		**Date of Sampling**	20/07/18	
			Date of Testing	20/07/18	
IS Sieve Size	**Weight Retained**	**Cum. Weight Retained**	**Cum. % Retained**	**Cum. % Passing**	**Spec. Limit (%) Passing**
40.00 mm	0	0	0	100	**100**
20.00 mm	266	266	2.66	97.34	**95 - 100**
10.00 mm	4698	4964	49.64	50.36	**25 - 55**
4.75 mm	4156	9120	91.20	8.80	**0 - 10**
Pan	880	10000			
Remarks :	Satisfactory / Not Satisfactory				

Consultant's Representative

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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TEST REPORT		
Clients	Bruhat Bangalore Mahanagara Palike	
Project	Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli	
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore	
Contractor	M/s Karthik Enterprises	
Total Weight:	10000	gms

SIEVE ANALYSIS

Type of Material	12.5 mm down size		Proposed Use	CONCRETE	
Sample Location	Plant		Date of Sampling	20/07/18	
			Date of Testing	20/07/18	
IS Sieve Size (in mm)	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
20.0	0	0	0	100	100
12.5	588	588	5.88	94.12	90-100
10.0	3453	4041	40.41	59.59	40-85
4.75	5246	9287	92.87	7.13	0-10
Pan	713	10000			

Remarks :	Satisfactory / Not Satisfactory

Consultant's Representative

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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TEST REPORT

Clients	BRUHAT BENGALORE MAHANAGARA PALIKE
Project	Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s Karthik Enterprises

SPECIFIC GRAVITY AND WATER ABSORPTION ON FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Sand/M sand	**Proposed Use**	Concrete
Location/Source	At Plant/site	**Date of Sampling**	20/07/18
Period of Soaking	24 hours	**Date of Testing**	20/07/18

Sl. No.	Test Property	TRIAL - 1	TRIAL - 2	TRIAL - 3	Average
A	Weight of sturated surface dry sample gm.	645	650	673	
B	Weight of oven - dry sample gm.	635	642	665	
C	Weight of Pycnometer Filled with water gm	1275	1275	1275	
D	Weight of Pycnometer + sample + water gm	1678	1678	1697	
E	Bulk specific gravity $\frac{B}{(C+A-D)}$	2.624	2.599	2.649	**2.624**
G	Absorption (%) $\frac{(A-B)*100}{B}$	1.575	1.246	1.203	**1.341**

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike
Project	Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s Karthik Enterprises

SIEVE ANALYSIS

Total Weight:	3000	gms			
Type of Materia	Fine aggregate (River Sand/M sand)		**Proposed Use**	Concrete	
Sample Location	At Plant/site		**Date of Sampling**	20/07/18	
			Date of Testing	20/07/18	

IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing (Zone-II)
10.00 mm	0	0	0	100.00	**100**
4.75 mm	260	260	8.67	91.33	**90 - 100**
2.36 mm	270	530	17.67	82.33	**75 - 100**
1.18 mm	425	955	31.83	68.17	**55 - 90**
0.600 mm	547	1502	50.07	49.93	**35 -59**
0.300 mm	768	2270	75.67	24.33	**8-30**
0.150 mm	540	2810	93.67	6.33	**0 - 10**
Pan	190	3000			-

Remarks : ✓ Satisfactory / Not Satisfactory

Consultant's Representative

TEJUS CONSULTANTS

Assistant Executive Engineer.
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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TEST REPORT					
Project	Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli				
Clients	Bruhat Bangalore Mahanagar Palike				
Consultants	TEJUS CONSULTANTS				
Contractor	M/s Karthik Enterprises				
Total Weight:	10000	gms			
SIEVE ANALYSIS					
Type of Material	20 mm down size		**Proposed Use**	Concrete	
Sample Location	At Plant		**Date of Sampling**	21/07/18	
			Date of Testing	21/07/18	
IS Sieve Size	**Weight Retained**	**Cum. Weight Retained**	**Cum. % Retained**	**Cum. % Passing**	**Spec. Limit (%) Passing**
40.00 mm	0	0	0	100	**100**
20.00 mm	288	288	2.88	97.12	**95 - 100**
10.00 mm	4752	5040	50.40	49.60	**25 - 55**
4.75 mm	4156	9196	91.96	8.04	**0 - 10**
Pan	804	10000			
Remarks :	✓ Satisfactory / Not Satisfactory				

Consultant's Representative

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Test Report on Compressive strength of concrete cubes

Project	Improvements to Road,Drain and Footpath in Tatanagar and Abutting Cross Roads in Ward No.8, Kodigehalli
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s Karthik Enterprises
Location:	Cement
Grade of concrete:	M20
Size of cube:	150x150x150 mm
Reference IS code:	IS:516-1959

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	18/07/18	25/07/18	7 days	8.822	22500	298	13.24	13.24
2	18/07/18	25/07/18	7 days	8.865	22500	300	13.33	
3	18/07/18	25/07/18	7 days	8.722	22500	296	13.16	

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PRECAST SLAB (CORE) TEST REPORT

Client	:	Bruhat Bangalore Mahanagara Palike
Contractor	:	M/s Karthik Enterprises
Name of Work	:	Improvements to Road,Drain and Footpath in 5th Main Road and abutting Cross Roads of Tatanagar in Ward No.8, Kodigehalli
No.of Sample Tested	:	3
Date of Testing	:	26/07/18
Techinical Reference	:	IS:516-1959 (Reaffirmed 1999), SP-24:1983.
Grade of Concrete	:	M_{20} - 100mm thick

Sl. No.	Dia of Core D (mm)	Height of Core H (mm)	Core Wt (Kg)	Density of Core (kg / m^3)	H / D	Correction factor (Based on H/D)	Failure Load (kN)	Core Strength (N/mm^2)	Correction Factor for the Dia. (Strength of the Core x 1.08)	Corrected Cylinder Compressive Strength (N/mm^2)	Equivalent Cube Compressive Strength (N/mm^2)
1	50.00	90.00	0.452	2557.80	1.80	0.960	38.10	19.40	20.96	20.12	25.15
2	50.00	90.00	0.444	2512.53	1.80	0.960	38.20	19.46	21.01	20.17	25.21
3	50.00	90.00	0.457	2586.09	1.80	0.960	38.44	19.58	21.14	20.30	25.37

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported reported within 15days from the date of testing.

Consultant's Representative

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Test Report on Compressive strength of concrete cubes

Project	Improvements to Road,Drain and Footpath in Tatanagar and Abutting Cross Roads in Ward No.8, Kodigehalli
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s Karthik Enterprises
Location:	Cement
Grade of concrete:	M20
Size of cube:	150x150x150 mm
Reference IS code:	IS:516-1959

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	19/07/18	16/8/2018	28 days	8.582	22500	453	20.13	20.22
2	19/07/18	16/8/2018	28 days	8.762	22500	454	20.18	
3	19/07/18	16/8/2018	28 days	8.560	22500	458	20.36	

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Test Report on Compressive strength of concrete cubes

Project	Improvements to Road,Drain and Footpath in Tatanagar and Abutting Cross Roads in Ward No.8, Kodigehalli
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s Karthik Enterprises
Location:	Cement
Grade of concrete:	M20
Size of cube:	150x150x150 mm
Reference IS code:	IS:516-1959

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	20/07/18	27/07/18	7 days	8.822	22500	288	12.80	13.13
2	20/07/18	27/07/18	7 days	8.865	22500	303	13.47	
3	20/07/18	27/07/18	7 days	8.722	22500	295	13.11	

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Test Report on Compressive strength of concrete cubes

Project	Improvements to Road,Drain and Footpath in Tatanagar and Abutting Cross Roads in Ward No.8, Kodigehalli
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s Karthik Enterprises
Location:	Cement
Grade of concrete:	M20
Size of cube:	150x150x150 mm
Reference IS code:	IS:516-1959

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	20/07/18	17/8/2018	28 days	8.582	22500	459	20.40	20.33
2	20/07/18	17/8/2018	28 days	8.762	22500	453	20.13	
3	20/07/18	17/8/2018	28 days	8.560	22500	460	20.44	

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Test Report on Compressive strength of concrete cubes

Project	Improvements to Road,Drain and Footpath in Tatanagar and Abutting Cross Roads in Ward No.8, Kodigehalli
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s Karthik Enterprises
Location:	Cement
Grade of concrete:	M20
Size of cube:	150x150x150 mm
Reference IS code:	IS:516-1959

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	18/07/18	15/8/2018	28 days	8.582	22500	450	20.00	20.04
2	18/07/18	15/8/2018	28 days	8.762	22500	452	20.09	
3	18/07/18	15/8/2018	28 days	8.560	22500	451	20.04	

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Test Report on Compressive strength of concrete cubes

Project	Improvements to Road,Drain and Footpath in Tatanagar and Abutting Cross Roads in Ward No.8, Kodigehalli
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s Karthik Enterprises
Location:	Cement
Grade of concrete:	M35
Size of cube:	150x150x150 mm
Reference IS code:	IS:516-1959

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	27/07/18	03/08/18	7 days	8.822	22500	510	22.67	22.67
2	27/07/18	03/08/18	7 days	8.865	22500	511	22.71	
3	27/07/18	03/08/18	7 days	8.722	22500	509	22.62	

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Test Report on Compressive strength of concrete cubes

Project	Improvements to Road,Drain and Footpath in Tatanagar and Abutting Cross Roads in Ward No.8, Kodigehalli
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s Karthik Enterprises
Location:	Cement
Grade of concrete:	M35
Size of cube:	150x150x150 mm
Reference IS code:	IS:516-1959

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	27/07/18	24/08/18	28 days	8.582	22500	788	35.02	34.96
2	27/07/18	24/08/18	28 days	8.762	22500	787	34.98	
3	27/07/18	24/08/18	28 days	8.560	22500	785	34.89	

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